

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/CA 00/00515

## Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:  
  
Although claims 18,19,23-25 and 30 are directed to a method of treatment of the human/animal body or to a diagnostic method practised on the human/animal body the search has been carried out and based on the alleged effects of the compound/composition.
2. ☒ Claims Nos.: 1-6,9-36(partially)  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:  
see FURTHER INFORMATION sheet PCT/ISA/210
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☒ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☒ No protest accompanied the payment of additional search fees.

## FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box I.2

Claims Nos.: 1-6,9-36(partially)

Present claims 1 and 29 relate to peptides or isomers thereof lacking any constant structural domain and almost any definition of the constituting amino acid residues (due to the facultative presence of all constituting Xaa's in formula I and the absence of any structural definition in claim 29), which peptides are defined by reference to desirable characteristics or properties, namely that they inhibit amyloidosis and/or are cytoprotective. Due to the facultative presence of all constituting Xaa's in formula I

The claims cover all compounds having these characteristics or properties, whereas the application provides support within the meaning of Article 6 PCT and/or disclosure within the meaning of Article 5 PCT for only a very limited number of such compounds. In the present case, the claims so lack support, and the application so lacks disclosure, that a meaningful search over the whole of the claimed scope is impossible. Independent of the above reasoning, the claims also lack clarity (Article 6 PCT). An attempt is made to define the compounds by reference to a result to be achieved. Again, this lack of clarity in the present case is such as to render a meaningful search over the whole of the claimed scope impossible. Consequently, the search has been carried out for those parts of the claims which appear to be clear, supported and disclosed, namely those parts relating to the compounds defined in the claims 7 and 8 and their conjugates as defined in claim 9, their compositions and use.

The applicant's attention is drawn to the fact that claims, or parts of claims, relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure.

**FURTHER INFORMATION CONTINUED FROM PCT/SA/ 210**

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

**1. Claims: 8(complete),1-7,9-36(partially)**

Compounds having the structure defined in claim 7, SEQ ID NO: 1-20,23 and 24,their compositions and use

**2. Claims: 1-7,9-36(partially)**

Compounds having the structure defined in claim 7, SEQ ID NO:21 and 22, their compositions and use

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 9808868	A	05-03-1998	AU 4238797 A EP 0929574 A US 5985242 A	19-03-1998 21-07-1999 16-11-1999
WO 9628471	A	19-09-1996	US 5817626 A US 5854215 A AU 5252496 A CA 2214247 A EP 0815134 A JP 11514333 T US 5854204 A US 5985242 A	06-10-1998 29-12-1998 02-10-1996 19-09-1996 07-01-1998 07-12-1999 29-12-1998 16-11-1999
WO 9721728	A	19-06-1997	AU 1072897 A EP 0866805 A	03-07-1997 30-09-1998
JP 10182695	A	07-07-1998	NONE	

# INTERNATIONAL SEARCH REPORT

Interr. . . . . Classification No  
PCT/US 97/15166

A. CLASSIFICATION OF SUBJECT MATTER  
IPC 6 C07K14/47 A61K38/17 G01N33/68

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
IPC 6 C07K A61K G01N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	TJERNBERG E.A.: "Arrest of $\beta$ -amyloid fibril formation by a pentapeptide ligand" JOURNAL OF BIOLOGICAL CHEMISTRY, vol. 271, no. 15, 12 April 1996, MD US, pages 8545-8548, XP002050226 see the whole document ---	1-17
A	FLOOD E.A.: "Topography of a binding site for small amnestic peptides deduced from structure-activity studies: relation to amnestic effect of amyloid B protein" PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF USA, vol. 91, January 1994, WASHINGTON US, page 380-384 XP002050227 see the whole document ---	1-17
-/--		

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

### \* Special categories of cited documents :

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \* & \* document member of the same patent family

Date of the actual completion of the international search

15 December 1997

Date of mailing of the international search report

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Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Groenendijk, M

## INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 97/15166

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WOOD E.A.: "Prolines and amyloidogenicity in fragments of the Alzheimer's peptide B/A4" BIOCHEMISTRY, vol. 34, no. 3, 24 January 1995, EASTON, PA US, pages 724-730, XP002050228 see the whole document ---	1-17
A	WO 93 11772 A (UNIV PRINCETON) 24 June 1993 see the whole document ---	1-17
P,X	SOTO E.A.: "Inhibition of Alzheimer's amyloidosis by peptides that prevent B-sheet conformation" BIOCHEMICAL AND BIOPHYSICAL RESEARCH COMMUNICATIONS, vol. 226, no. 3, 24 September 1996, ORLANDO, FL US, pages 672-680, XP002050229 The whole document; see especially pp.677-678; fig.5 ---	1-17
P,X	TJERNBERG E.A.: "Controlling amyloid B-peptide fibril formation with protease-stable ligands" JOURNAL OF BIOLOGICAL CHEMISTRY, vol. 272, no. 19, 9 May 1997, MD US, pages 12801-12806, XP002050230 see the whole document ---	1-17
P,Y	WO 97 21728 A (KAROLINSKA INNOVATIONS AB ;NORDSTEDT CHRISTER (SE); NAESLUND JAN ()) 19 June 1997 See especially ex.5 ---	1-17
P,Y	WO 96 28471 A (PHARMACEUTICAL PEPTIDES INC) 19 September 1996 see the whole document -----	1-17

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2. ☐ Claims Nos.:  
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International Application No

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 9311772 A	24-06-93	US 5338837 A	16-08-94
		AU 3278593 A	19-07-93
		BR 9206927 A	21-11-95
		CA 2117332 A	24-06-93
		EP 0618800 A	12-10-94
		HU 70743 A	30-10-95
		JP 7503708 T	20-04-95
		NO 942165 A	01-08-94
		PL 171131 B	28-03-97
		US 5455335 A	03-10-95
		US 5693769 A	02-12-97
		US 5627270 A	06-05-97
		US 5571795 A	05-11-96
WO 9721728 A	19-06-97	AU 1072897 A	03-07-97
WO 9628471 A	19-09-96	AU 5252496 A	02-10-96